

crispprd 1.0



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## Abstract

**Grant Number:** 5F31NR007505-02

**PI Name:** CHRISTMAN, SHARON K.

**PI Title:**

**Project Title:** INTERVENTION TO SLOW PROGRESSION OF ARTERIAL DISEASE

**Abstract:** *Peripheral arterial disease (PAD) is a major cause of morbidity in the elderly. The current body of literature available on ways to prevent the progression of PAD lacks theoretical foundation for intervention development. Therefore, the specific aim of the proposed study is to evaluate the effectiveness of a theory-based, nurse-implemented exercise adoption and smoking cessation patient education program on functional status, smoking cessation rate, decisional balance, exercise self-efficacy, and stage of change in persons with PAD. The hypothesized changes after the intervention include an increase in functional status, decisional balance, and exercise self-efficacy compared to the control group; a greater number of persons who have quit smoking compared to the control group; and a greater percentage of persons who progress forward through the stages of change for exercise adoption and smoking cessation compared to the control group. A pretest-posttest control group design with an exercise adoption and smoking cessation intervention is proposed. A convenience sample of 50 men and women between the ages of 50-70 years with arterial claudication symptoms will be recruited. The experimental condition will consist of a 12-week, one-hour per week group education session. The educational component will be developed using the transtheoretical model (TTM) for behavior change. Using this model, strategies for adopting exercise or quitting smoking will be individualized for each subject. In order to promote maintenance of behavior change after the 12-week intervention subjects will develop individualized contracts, and the PI will make follow-up phone calls every two weeks for 3 months. The control group will receive usual care. Control subjects will be seen at baseline, 3 and 6 months for data collection. In addition, at the end of six months, they will be offered the opportunity to*

*participate in the 12-week education intervention with other control subjects. The change over 6 months in functional status, decisional balance, and exercise self-efficacy will be assessed using slope analysis. The change in the proportion of persons who have quit smoking, and the movement between stages will be assessed using a chi-square. The proposed study would be the first to experimentally examine the effectiveness of a theory-based nurse-implemented exercise adoption and smoking cessation intervention for use with PAD patients. The anticipated results of this study are significant in that recommendations could be made for vascular nurses who work with PAD patients to prevent the progression of their disease, and as a result avoid costly medical and surgical interventions.*

**Thesaurus Terms:**

*exercise, human therapy evaluation, nursing intervention, peripheral blood vessel disorder, smoking cessation  
behavior modification, functional ability, longitudinal human study, tobacco abuse education  
clinical research, human subject*

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